Amendments to the Claims:

The following listing of the claims replaces all previous version and listings of the claims in the present application.

1. (Cancelled)

2. (Previously Presented) The method of claim 20 wherein the processing step comprises

defining a first traffic class corresponding to the web service;

defining at least a second traffic class corresponding to an attribute of the web service; and

associating the at least a second traffic class as a child traffic class of the first traffic class in a hierarchical traffic classification scheme.

3. (Original) The method of claim 2 wherein the attribute in the second defining step is an operation of the web service.

4. (Original) The method of claim 2 wherein the attribute in the second defining step is a binding supported by the web service.

5. (Previously Presented) The method of claim 20 wherein the web services interface definition document is a WSDL document.

6. (Previously Presented) A method facilitating the classification of web services network traffic, comprising

discovering, at a network device, one or more web services based on web service invocation messages received at the network device;

maintaining a tracking list data structure comprising, for each discovered web service, a web service identifier corresponding to the web service and a transaction count associated with the web service;

incrementing, responsive to a message indicating a new web services network transaction, a transaction count associated with the web service identified in the message;

presenting, in a user interface, one or more of the web service identifiers and corresponding transaction counts, wherein the user interface allows for selection of one or more web service identifiers; and

configuring, responsive to selection of a web service identifier, a network traffic classification mechanism to identify the web service corresponding to the web service identifier by creating a traffic class identifier corresponding to the web service; creating at least one matching rule defining an attribute of the web service; associating the at least one matching rule to the traffic class identifier in the traffic classification mechanism.

7. (Cancelled)

8. (Currently Amended) The method of claim [[7]] 6 wherein the attribute in the second creating step is the web service identifier corresponding to the web service.

9. (Original) The method of claim 8 further comprising
creating at least one additional matching rule defining an attribute of the web service.

10. (Original) The method of claim 9 wherein the attribute in the third creating step is a protocol associated with the web service.

11. (Original) The method of claim 10 wherein the protocol is a web services protocol.

12. (Original) The method of claim 10 wherein the protocol is the SOAP protocol.

13. (Original) The method of claim 10 wherein the protocol is the HTTP protocol.

14. (Currently Amended) The method of claim 6 further comprising
maintaining a count of [[the]] a number of data flows corresponding to each web service traversing the communications path.

15. (Original) The method of claim 6 wherein the web service identifier comprises a host name.

16. (Original) The method of claim 6 wherein the web service identifier comprises a host name and a uniform resource indicator.

17. (Original) The method of claim 6 wherein the configuring step is performed in response to a command from an end user.

18. (Original) The method of claim 6 wherein the monitoring step comprises

upon detection of a new data flow,

parsing at least one packet in the data flow to identify the protocol attributes corresponding to the data flow;

matching the identified protocol attributes to a predetermined set of web services protocol attributes to determine whether the data flow is web services web services data flow.

19. (Original) The method of claim 18 wherein the parsing step comprises parsing the at least one packet in the data flow into a flow specification, wherein the flow specification contains at least one instance of any one of the following: a protocol family designation, a direction of packet flow designation, a protocol type designation, a binding type, a pair of hosts, a pair of ports, a pointer to a MIME type, a pointer to an application-specific attribute.

20. (Previously Presented) The method of claim 6 wherein the configuring the network traffic classification mechanism further comprises

receiving an interface definition document defining the attributes of the web service;

processing the interface definition document to identify at least one traffic class corresponding to the web service; and

configuring a network traffic classification mechanism to identify the at least one traffic class based on at least one attribute obtained from the web services definition document.

21. (Original) The method of claim 20 further comprising

subsequent to the configuring step, processing the latest interface definition document corresponding to the web service to determine whether changes to the configuration of the network traffic classification mechanism are required.

22. (Previously Presented) An apparatus facilitating the classification of web services network traffic, comprising

a packet processor operative to

detect data flows in network traffic traversing a network;

a traffic classification database operative to

match data flows against a plurality of traffic classes, wherein each traffic class in the plurality of traffic classes is defined by at least one matching attribute;

a web services classification module operative to

identify web services in the data flows traversing the network;

discover one or more web services based on web service invocation messages received at the packet processor;

maintain a tracking data structure comprising, for each discovered web service, a web service identifier corresponding to the web service and a count of the number of web services network transactions detected in the data flows traversing the network;

increment, responsive to a message indicating a new web services network transaction, a transaction count associated with the web service identified in the message;

present, in a user interface, one or more of the web service identifiers and corresponding transaction counts, wherein the user interface allows for selection of one or more web service identifiers; and

create, responsive to selection of a web service identifier, a traffic class in the traffic classification database for a selected web service in the data structure, wherein at least one matching rule associated with the traffic class includes the web service identifier associated with the web service.

23. (Original) The apparatus of claim 22 wherein the web services classification module is further operative to

receive an interface definition document defining the attributes of the selected web service;

process the interface definition document to identify at least one traffic class corresponding to the selected web service; and

create the at least one traffic class in the traffic classification database, wherein at least one matching rule associated with the corresponding traffic class is based on one or more attributes in the interface definition document.

24. (Original) The apparatus of claim 23 wherein the at least one traffic class is identified relative to the operations identified in the interface definition document.

25. (Original) The apparatus of claim 23 wherein the at least one traffic class is identified relative to the bindings identified in the interface definition document.

26. - 30. (Cancelled)

31. (Previously Presented) The apparatus of claim 23 wherein, to process the interface definition document, the web services classification module is further operative to

define a first traffic class corresponding to the web service;

define at least a second traffic class corresponding to an attribute of the web service; and

associate the at least a second traffic class as a child traffic class of the first traffic class in a hierarchical traffic classification scheme.

32. (Previously Presented) The apparatus of claim 31 wherein the attribute in the second defining step is an operation of the web service.

33. (Previously Presented) The apparatus of claim 31 wherein the attribute in the second defining step is a binding supported by the web service.

34. (Previously Presented) The method of claim 6 wherein the tracking list data structure comprises a hash table including one or more entries, wherein each entry comprises a key value

and a transaction count, wherein the key value is generated by applying a hashing function to a host name and URI pair identified in messages initiating web services network transactions.

35. (Previously Presented) The method of claim 6 further comprising applying one or more bandwidth utilization controls to data flows based on the web services traffic classes associated with the data flows by the traffic classification mechanism.

36. (Previously Presented) The apparatus of claim 22 wherein the tracking data structure comprises a hash table including one or more entries, wherein each entry comprises a key value and a transaction count, wherein the key value is generated by applying a hashing function to a host name and URI pair identified in messages initiating web services network transactions.

37. (New)   A method of classifying web services network traffic, comprising:
        maintaining a list of traffic classes,
                wherein each traffic class is associated with a set of data flow attributes,
                wherein each traffic class comprises a list of data flows grouped together based on the set of data flow attributes associated with the traffic class, and
                wherein each set of data flow attributes comprises at least one application-specific attribute;
        receiving a data packet;
        determining a data flow to which the data packet belongs based on selected data flow attributes that include at least one application-specific attribute;
        determining whether the data packet is associated with a web service;
        if the data flow is a new data flow and the data packet is associated with a web service, then
                determining whether the web service associated with the data packet is in a list of web services, and
                if the web service associated with the data packet is not in the list of web services, then adding the web service to the list of web services.